The upper lobe is designed to maintain an 8,000 ft. cabin altitude at 40,000 ft. flight altitude. All pressurized doors open inward and all windows provide a double pressure barrier for adequate decompression protection.

The nose cap forward of Station 145 uses radial formers from the joint to a radar support ring at the very front of the airplane. This ring supports the radar unit as well as the fiberglas radome which is de-iced by hot air ducted through the laminated construction.

Fuselage Center Section

The fuselage center section contains the main cargo compartment, aft loading door-ramp, forward and aft cargo doors, and wing-to-fuselage attachment. The fuselage is a figure-eight type cross-section. The cargo compartment is located below the upper compartment floor and extends from a bulkhead at Station 370 to frame Station 1210 with no intermediate bulkheads. Immediately aft, in tandem, are the loading door-ramp and aft cargo door. In the door-ramp and door cut-out region, above the upper floor, a closed section supports the torsional tail loads. The fuselage center section is not pressurized.

The section of fuselage above the upper floor extending the full length of the center section and the portion aft of Station 1210 is of conventional semi-monocoque construction with external sheet and both rolled and extruded hat section longerons of aluminum alloy. The frames in the portion above the floor are extruded aluminum alloy Z sections. The frames in the portion aft of Station 1210 and below the floor are formed aluminum alloy Z sections. The upper floor or walkway consists of aluminum alloy skin on extruded magnesium hat section longerons, and extends the full length of the fuselage. The longerons are supported at frame stations by an extruded magnesium channel which is an integral part of each fuselage frame.

The section of fuselage below the upper floor, comprising the main cargo compartment, is more of a pure monocoque construction with frames spaced from 17 to 23 inches on center. The frames are fabricated from aluminum alloy extruded angles and sheet webs. Intermediate sub-frames of rolled aluminum alloy hat sections separate each bay into three equal parts. Front spar, rear spar, and main landing gear attach frames are aluminum alloy forgings. The external sheeting is aluminum alloy. The cargo flooring is made up of extruded magnesium planks extending longitudinally and supported by transverse beams at each frame. The transverse floor beams are fabricated of extruded magnesium I sections and angles. In addition, a centerline longitudinal floor beam extends the full length of the cargo compartment. This beam is fabricated of extruded magnesium T sections.